

a guide gas-supplying means and upwardly rising through a space constituted by the furnace of tubular reactor and the discharge pipe to be sucked into the inside of the discharge pipe.

15. The process according to claim 10, wherein the furnace of tubular reactor is of a vertical type and has the feedstock-supplying means at a top of the reactor means and the discharging means at a bottom of the reactor means.

16. Carbon fibrous materials formed by thermal decomposition of the metal catalyst source and the carbon source in the reaction zone of the furnace of tubular reactor according to claim 9, the carbon fibrous materials being charged into the discharge pipe facing the reaction zone together with the guide gas upwardly rising on an outside surface of the discharge pipe and sucked into the inside of the discharge pipe at the first opening thereof, and then collected.

IN THE ABSTRACT:

On page 40, please replace the section heading "ABSTRACT" with the following rewritten section heading:

"Abstract of the Disclosure"

[On page 40, the first and second paragraphs of the Abstract have been amended as follows:]

Disclosed is an apparatus for production of vapor-phase growth carbon fibers. The apparatus can continuously produce these carbon fibers for a long time without blocking a furnace of tubular reactor of the apparatus. Also disclosed is a process for production of carbon fibers by means of the apparatus, a device for preventing deposition of carbon fibers